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## What to do during a bushfire

### Protect yourself

#### Radiant heat - the killer in a bushfire

Radiant heat can kill. You need to cover up, dress to protect yourself and take refuge from direct heat.

In the past, people have been caught in bushfires wearing light summer dresses, shorts, singlets and even swimsuits. They usually die without the flames even touching their exposed skin. The real risks of bushfire are dehydration and heat stroke which can lead to unconsciousness and death.

If you put your hand near an open flame, an electric heater element or electric light bulb, you can feel the radiant heat it generates. Draw your hand away and the amount of heat on your skin decreases.

Put something between your skin and the heat source and again, your skin immediately feels cooler. This is the key to protecting yourself from radiant heat in bushfires - distance and shielding protect you from dangerous exposure.

#### Shield yourself from radiant heat

Bushfires usually occur on hot days. You and your family may be in shorts or swimsuits and bare feet and sandals. Remember, the deadly effects of radiant heat are increased by the amount of skin exposed to it. So as soon as you know there are bushfires in your area, cover up!

Fire fighters wear protective gear to survive. So should you. Some personal protective clothing is general purpose and you will probably already have it.

#### Appropriate personal protective clothing

Organise a fire cupboard or box before summer and the fire season and pack it with clothes for all members of the family, and ensure all household members know its location. Whether you plan to stay and actively defend the house or leave early well before threatened, you still need to have access to protective clothing.

- Long sleeved overalls or long-sleeved shirt and trousers in natural fibres (such as wool or cotton, but not heavy clothing)
- Wide-brimmed hat or hard helmet
- Solid footwear such as boots, preferably leather
- Woollen or cotton socks
- Gloves – sturdy garden variety, not rubber or synthetic
- A moistened mask or large handkerchief for face protection and to filter smoke
- Goggles or glasses to protect eyes from smoke and flying embers

The heat will be intense so don't overload yourself with tight-fitting, heavy clothes. Remember that everyone should wear protective clothing, not just those involved in actively defending the home.

All members of the household should wear appropriate protective clothing whenever there is an uncontrolled fire in the area.

As the fire front passes, radiant heat levels become extreme. Your clothes will not be sufficient to protect you for the five to twenty minutes it may take for the main fire to pass. Radiant heat cannot penetrate through solid objects. It travels in straight lines and your best protection is a well-prepared house. People protect houses and houses protect people.

As the fire front passes, stay inside with doors and windows shut to protect against embers entering your house. Remember, if you flee from your house, you lose its protection against radiant heat. Many people have died during bushfires because they were caught out either on the road or outside rescuing animals.

Taking shelter in pools, dams and water tanks is not a safe option. The air above the water will be dangerous to breath, and may be deadly when inhaled.

#### Reduce the risk of dehydration

Dehydration occurs when the body loses more fluid than it gains. Dehydration is dangerous because it creates a build up of salts and minerals in the body tissues which put strain on the kidneys. When the kidneys fail, death can quickly follow.

The high air temperature during a bushfire and the added stress of wearing extra clothing to shield against radiant heat will make you sweat heavily. People involved in active bushfire defence may lose up to two litres of fluid per hour.

Some simple ways to avoid dehydration are:

- Keep COOL by splashing your face with cool water
- Drink cool WATER often – even if you don't feel thirsty
- AVOID alcohol and fizzy drinks as they increase dehydration

Children and the elderly are especially vulnerable, so pay extra attention to their needs. Cool the skin by sponging with cold water. Make sure they drink frequently.

#### Protect yourself from smoke

Bushfire smoke contains particles of different sizes. The impact smoke has on your health depends on your age, whether you have a respiratory or lung condition and your length of exposure.

Signs of smoke irritation include itchy eyes, sore throat, runny nose and coughing. For most healthy adults the effects of smoke exposure will clear up quickly after the smoke goes away. Children, older people and those with pre-existing



illnesses such as asthma or heart conditions are more sensitive to the effects of breathing in fine smoke particles.

On smoky days, try to:

- Minimise outdoor physical activity where practical
- Rest as much as possible and keep away from the smoke if you have a pre-existing respiratory or heart condition and keep medication close-at-hand for use as prescribed
- Keep windows and doors closed when indoors and switch air-conditioners (if operating) to “recycle or recirculate” to reduce the amount of indoor smoke
- Seek medical advice immediately if you experience breathing problems or chest pain

For information on air quality in your area visit the EPA Victoria website at: [www.epa.vic.gov.au/bushfires](http://www.epa.vic.gov.au/bushfires) The Department of Human Services also has fact sheet information at [www.dhs.vic.gov.au/emergency](http://www.dhs.vic.gov.au/emergency).

## Mental well being

Bushfires can profoundly affect people, emotionally as well as physically. Being mentally prepared for a bushfire can help you implement your physical survival plan. Knowing what to expect may also help reduce the impact of fires and reduces the risk of panic, stress and trauma.

## Consider the following

- Go through your plan step by step on the day and stick to it
- Focus on your plan and actions, put emotions aside till later
- Deal with what is needed now and prepare for the next step
- Concentrate on giving those about you confidence and encouragement

## Risk of physical injuries

The risk of physical injury is increased during a bushfire. These injuries can be caused by poor visibility, falling branches, hot objects, over exertion, emotional fatigue or falling from an unsecured ladder or rooftop.

To reduce the likelihood of injuries, it is recommended that you wear appropriate protective clothing, move around your property with great care, be aware of hot objects and understand your physical and emotional limits.

## If caught on the road

Remember, if your plan is to leave early when a fire is burning in your area, do so before the fire threatens and road travel becomes hazardous. Leaving late is a deadly option. Declaration of a Total Fire Ban, or other high fire risk days, should be your trigger to put your Bushfire Survival Plan into action.

If you are driving and see smoke ahead, always u-turn to safety if you have the option. Avoid being caught out on the road during a fire as it is highly dangerous - a car will not offer safe protection from the radiant heat. However, if you are caught in a fire do not get out and run. Being in a car is still better than being in the open.

- Pull over to the side of the road into a clear area – a dirt track may be the best option
- Try not to park the car in a place where it is surrounded by vegetation that will burn - avoid long dry grass and scrub
- Park behind a solid object, if possible, such as a bus shelter or brick toilet block clear of vegetation.
- Ensure all windows and doors are tightly closed and shut all air vents
- Put the hazard lights and headlights on so other vehicles can see you
- Cover exposed skin as much as possible with clothes made of natural fibres
- Get down as low as possible below window level and cover up with a woollen blanket until the fire front passes.
- Remember to drink lots of water to stop yourself from dehydrating.
- Move to safety only when you will feel a reduction in the heat
- Always carry a woollen blanket in your car if travelling in the country during the fire season

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### Protect your property

#### Actively defending a well prepared house.

A house is far more likely to survive if able-bodied people are there during the bushfire because they can quickly put out small outbreaks on or near the house. Most houses burn down from ember attack after the fire front has gone through.

However, to actively defend you need to make sure that you have:

- Prepared your house and property
- Created a defensible space with dry vegetation already removed from around the house
- Checked that your fire fighting equipment is in good working order and know how to use it
- Provided personal protective clothing for all members of your household
- Considered yourself as being emotionally and physically able to defend.

Property and house preparedness should be an annual event, preferably before the start of summer and the fire season. Most people who are threatened by bushfire will not have time to increase their preparedness before the fire impacts on their home.

Residents must keep in mind that in a major bushfire, CFA will not be able to provide assistance to every home.

There may also be private vehicles involved in fighting the fire. Should you plan to assist in the fire fighting effort, please consider the safety of your house and yourself before leaving your property. CFA has produced the booklet *Operating Private Equipment at Fires*. Be familiar with the guidelines before assisting in the fire fighting effort. These can be found on [www.cfa.vic.gov.au](http://www.cfa.vic.gov.au)

Your house and property have to be prepared well before the day of the fire threat.

#### Before the fire front arrives

##### Inside:

- Dress in personal protective clothing to protect from radiant heat
- Shut all windows and doors to prevent smoke and flames from entering the house
- Move furniture away from the windows to prevent embers from entering the house through a broken window and catching alight in the furniture
- Secure a ladder under the manhole and place a torch nearby for checking the ceiling space for any embers that may have landed
- Fill the bath, laundry trough and buckets with water to provide a water supply in the house for putting out any small fires that may start
- Cover your face with a cotton handkerchief to protect against smoke inhalation
- Place wet blankets or towels around window and door edges inside the house to stop smoke and embers from entering the house

##### Outside:

- Check water supplies around your home and fill any additional containers
- Remove or place inside garden furniture, doormats and other loose items that could trap embers



Move furniture away from windows



When using ladders, secure them safely.



Place wet blankets or towels around windows and door edges



- Hose down the side of the house facing the fire, and garden area close to the house.
- Block downpipes and fill gutters with water
- Patrol your property for any embers and extinguish them using mops and buckets of water, backpack sprayers or a fire pump
- Turn on your sprinkler system if there is one installed
- Listen to ABC radio for regular updates of the fire situation.

Most roofs will not burn, so don't get up on your roof to hose it down as wet roofs are slippery and can be dangerous.

### During the fire

Go inside when it becomes too hot to stay outside. The skin on your ears and hands will alert you that conditions have become too hot to survive outside. Your home will protect you from radiant heat while the fire front passes through – typically taking around ten to twenty minutes.

Take all fire fighting equipment inside with you, including tap fittings, hoses and the portable fire fighting pump, as these items may become very hot and even melt as the fire front passes through.

Stay inside your house while the fire front passes around the house and look out for burning embers landing inside the home. Extinguish any spot fires that start. Do not hide or take shelter in a part of your house where it is not possible to see the progress of the fire. Keep a watch of the situation and return outside as soon as the main fire front has passed to extinguish any small fires that may have started.

If your house catches fire during the passage of the main fire front and you are unable to extinguish what has now become, in effect, a house fire, go outside onto burnt ground after the fire front has passed. Keep well away from the radiant heat that is being generated from the structure fire. Do not return inside the house for any reason.



Move things that will burn inside, including door mats, outside furniture or hanging baskets.

### After the fire front has passed

Continue to wear your personal protective clothing and go outside again as soon as it is safe. Safely water down the outside of the house, including the roof, and look out for small fires around your house.

Continue to look out for small fires and burning embers many hours after the fire has passed.

#### Check for burning embers:

- inside the roof
- under the floor boards
- under house spaces
- on verandas and wooden decking
- on timber window ledges and door sills
- on roof lines and in roof gutters
- around outdoor furniture
- on doormats
- in garden beds and mulch
- in wood heaps
- in sheds and carports

#### What to expect during a bushfire:

- Hot weather
- Wind
- A lot of smoke and noise
- Loss of power and water
- Loss of phone
- Fire trucks and aircraft nearby

#### Try to:

- Keep calm
- Take breaks
- Drink plenty of water

Defending your home during a bushfire can be a very frightening and emotional experience. The conditions will also make it physically demanding.